

LETTERS

nations be considered as an integral part of ongoing medical care. They should be performed by the executive's treating physician whenever possible. Should that physician not be able or willing to perform the comprehensive examination that is desired, he may suggest the use of another physician whom he normally uses as a consultant. That physician (or group) can later serve as consultant in the event of emergency or serious illness.

Finally, the utility of organizations that specialize only in doing physical examinations is to be seriously questioned.

PHILIP R. ALPER, MD
Millbrae, California

Asbestos Exposure and Cancer of the Larynx

TO THE EDITOR: Drs. Rom and Palmer, in their otherwise comprehensive review of asbestos-related diseases (Rom WN, Palmer PES: The spectrum of asbestos-related diseases. *West J Med* 121:10-21, Jul 1974), only briefly refer to the emerging evidence for an association between asbestos exposure and cancer of the larynx. We feel that this possible association deserves wide recognition in view of the difficulty of any one center accumulating sufficient cases for pathologic study.

A retrospective study of 100 male British patients with squamous carcinoma of the larynx presenting to the Liverpool Ear, Nose and Throat Hospital revealed a highly significant correlation with an occupational history of exposure to asbestos compared to age-matched control hospital inpatients with nonmalignant disease (31 percent versus 3 percent). A higher percentage of patients with laryngeal carcinoma smoked but among these the smoking histories were comparable in affected patients both with and without a significant exposure history. The mean latency period was noted to be 30 years between the first known exposure and frank clinical carcinoma, with a mean duration of exposure of 27 years.¹ A prospective study of 4,000 factory workers with presumed exposure has demonstrated two cases after 41 years, compared to an incidence in the general population of 1/50,000. One of the two had only one month of severe exposure.²

Separating an association with asbestos from possible association with smoking and alcoholism may prove to be a formidable problem. A recent epidemiologic investigation of pulmonary and laryngeal carcinoma has made reference to the problem of separating the effects of ambient particulate asbestos and other constituents of air pollution.³ Other cancers of the head and neck may also be associated with asbestos exposure as suggested by similar preliminary data from the Liverpool group.⁴

Such a problem would lend itself to a search for asbestos bodies and other high atomic number particulates in surgical or necropsy tissue. The techniques of scanning electron microscopy and x-ray spectroscopic analysis have been recently applied in such cases.^{5,6} These and other sophisticated techniques of visualization and analysis are now available for application by suitably equipped laboratories.

Examination of a few selected cases of laryngeal carcinoma having an accurate and complete occupational history of exposure to asbestos could yield data of practical and theoretical interest.

Application of advanced techniques such as these may contribute substantially to our understanding of the pathophysiology of environmentally induced disease.⁷

TEE L. GUIDOTTI, BS
*Class of 1975, University of California,
San Diego, School of Medicine
COSTEP Trainee, USPHS
Morgantown, West Virginia*

JERROLD L. ABRAHAM, MD
*Chief of Pathology
Appalachian Laboratory for Occupational
Respiratory Diseases, USPHS
Morgantown, West Virginia*

PHILLIP B. DENEE, PH D
*Biophysicist, Pathology Section
Appalachian Laboratory for Occupational
Respiratory Diseases, USPHS
Morgantown, West Virginia*

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